L Number	Hits	Search Text	DB	Time stamp
2	0	polyisobutylenesulfonate	USPAT; US-PGPUB; EPO; DERWENT	2004/08/02 09:37
1	6	polyisobutylene adj sulfonate	USPAT; US-PGPUB; EPO; DERWENT	2004/08/02 09:36
3	0	polyisobutylene adj sulfonate	USOCR	2004/08/02 09:36
4	0	polyisobutylenesulfonate	USOCR	2004/08/02 09:36
5	0	isobutylenesulfonate	USPAT; US-PGPUB; EPO; DERWENT	2004/08/02 09:37
6	1	isobutylene adj sulfonate	USPAT; US-PGPUB; EPO; DERWENT	2004/08/02 09:38
7	2	isobutylene adj sulfonate	USOCR	2004/08/02 09:38

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 NEWS  2           "Ask CAS" for self-help around the clock
 NEWS  3  May 12   EXTEND option available in structure searching
 NEWS  4  May 12   Polymer links for the POLYLINK command completed in REGISTRY
 NEWS  5  May 27   New UPM (Update Code Maximum) field for more efficient patent
                   SDIs in CAplus
 NEWS  6  May 27   CAplus super roles and document types searchable in REGISTRY
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 NEWS  8  Jun 28   ANTE, AQUALINE, BIOENG, CIVILENG, ENVIROENG, MECHENG,
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               MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
               AND CURRENT DISCOVER FILE IS DATED 26 APRIL 2004
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FILE LAST UPDATED: 1 Aug 2004  (20040801/ED)

  This file contains CAS Registry Numbers for easy and accurate
  substance identification.
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=> s polyisobutylene adj sulfonate
         11094 POLYISOBUTYLENE
           213 ADJ
         53055 SULFONATE
L1           0 POLYISOBUTYLENE ADJ SULFONATE
                (POLYISOBUTYLENE(W)ADJ(W)SULFONATE)

=> s polyisobutylene sulfonate
         11094 POLYISOBUTYLENE
         53055 SULFONATE
L2           5 POLYISOBUTYLENE SULFONATE
                (POLYISOBUTYLENE(W)SULFONATE)

=> d l2 1-5

L2   ANSWER 1 OF 5  CAPLUS  COPYRIGHT 2004 ACS on STN
Full Text | Citing References
AN   2001:935728  CAPLUS
DN   136:72131
TI   Surfactant blends containing polyisobutylene sulfonates for aqueous
     surfactantflood petroleum recovery
IN   Hou, Peter Wanggi; Feuerbacher, David G.
PA   Crompton Corporation, USA
SO   PCT Int. Appl., 24 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
     ----------          ----   --------    --------------------   --------
PI   WO 2001098432       A2     20011227    WO 2001-US17571        20010531
     WO 2001098432       A3     20020711
         W:  CA, CN, ID
PRAI US 2000-595996      A      20000616

L2   ANSWER 2 OF 5  CAPLUS  COPYRIGHT 2004 ACS on STN
Full Text | Citing References
AN   1994:9350  CAPLUS
DN   120:9350
TI   Structure-property relationships in polyisobutene telechelic ionomers with
     narrow or broad polydispersity
AU   Loveday, Don; Wilkes, G. L.; Lee, Youngkwan; Storey, R. F.
CS   Dep. Chem. Eng., Virginia Polytech. Inst. and State Univ., Blacksburg, VA,
     24061, USA
SO   Polymer Preprints (American Chemical Society, Division of Polymer
     Chemistry) (1992), 33(2), 288-9
     CODEN: ACPPAY; ISSN: 0032-3934
DT   Journal
LA   English

L2   ANSWER 3 OF 5  CAPLUS  COPYRIGHT 2004 ACS on STN
Full Text | Citing References
AN   1988:115643  CAPLUS
DN   108:115643
TI   Coal-water slurry compositions
IN   Shimakawa, Katsuhiko; Uchida, Tatsuo; Yoshikawa, Yasuhiro
PA   Nikka Chemical Industry Co., Ltd., Japan
SO   Jpn. Kokai Tokkyo Koho, 6 pp.
     CODEN: JKXXAF
DT   Patent
LA   Japanese
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FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 62232496	A2	19871012	JP 1986-75502	19860403
	JP 05076996	B4	19931025		
PRAI	JP 1986-75502		19860403		

L2 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN

Full Text | Citing References

AN 1979:613691 CAPLUS
DN 91:213691
TI Thiophosphonate dispersant combination
IN De Vries, Louis
PA Chevron Research Co., USA
SO U.S., 6 pp.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 4

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 4159959	A	19790703	US 1978-920875	19780630
	CA 1121793	A1	19820413	CA 1979-324332	19790328
	GB 2025456	A	19800123	GB 1979-20915	19790615
	GB 2025456	B2	19821020		
	FR 2429834	A1	19800125	FR 1979-16061	19790622
	FR 2429834	B1	19840824		
	NL 7905011	A	19800103	NL 1979-5011	19790627
	DE 2926069	A1	19800110	DE 1979-2926069	19790628
	JP 55007895	A2	19800121	JP 1979-81589	19790629
PRAI	US 1978-920873		19780630		
	US 1978-920874		19780630		
	US 1978-920875		19780630		
	US 1978-920876		19780630		

L2 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN

Full Text | Citing References

AN 1978:582219 CAPLUS
DN 89:182219
TI Superbasic sulfonates
IN Bakker, N.
PA Chevron Research Co., USA
SO Belg., 27 pp.
CODEN: BEXXAL
DT Patent
LA French
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	BE 861125	A1	19780316	BE 1977-182876	19771123
	US 4137184	A	19790130	US 1976-751422	19761216
	JP 53088088	A2	19780803	JP 1977-135597	19771111
	GB 1588246	A	19810423	GB 1977-48442	19771121
	ZA 7707289	A	19781025	ZA 1977-7289	19771206
	FR 2374407	A1	19780713	FR 1977-37217	19771209
	DE 2755225	A1	19780622	DE 1977-2755225	19771210
	NL 7714001	A	19780620	NL 1977-14001	19771216
PRAI	US 1976-751422		19761216		

=> **d l2 1-5 abs**

L2 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN

Citing References

AB Aq. flooding fluids for alk. surfactantflood and waterflooding petroleum recovery (at pH >7) includes a surfactant blend contg. a synthetic **polyisobutylene sulfonate** surfactant and at least one secondary surfactant selected from other sulfonates, alcs., and nonionic surfactants, optionally in the presence of a water-sol. polymeric viscosifier or thickener. The alk. materials added to the aq. surfactant soln. include NaOH, Na2CO3, NaHCO3, and Na2SO4. Such fluids are able to increase the petroleum recovery to >10% of the original oil in place.

L2 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN

Citing References

AB The mol. wt. polydispersity of sulfonate-terminated triarm polyisobutylenes affects the long-range order as does the valence of the counter-cation. A decrease in the breaking strain and an increase in modulus are obsd. when the mol. wt. distribution (MWD) narrows. Continuous and periodic sheetlike morphol. are indicated for the narrow MWD ionomers in contrast to the more typical ion multiplets in small-angle x-ray scattering and cluster morphol. found in the broad MWD telechelic oligomers.

L2 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN

Citing References

AB Dispersants for highly-concd. coal-water slurries, present at 0.1-1.0 wt.% concn., contain a sulfonate salt of polybutadiene or polyisobutylene derivs. (mol. wt. 1,000-200,000). Thus, a 70 wt.% coal-water slurry (78% particle diam. ≤200 mesh) was blended with 0.5 wt.% of a 1,4-butadiene polymer sulfonic acid Na salt (mol. wt. 3000), and the mixt. was then stabilized for 7 days and had a viscosity (at 30°) of 720 cP, vs. <5400 cP for a conventional dispersant (contg. sodium lignosulfonate).

L2 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN

Citing References

AB The detergency of lubricating oils is improved by the addn. of an alk. earth metal C20-100 aliph. sulfonate (10-30 mmol/kg) and a monohydroxyalkyl hydrocarbyl thiophosphonate (2-10 wt. %). Thus, 12,000 g polyisobutylene [9003-27-4] (mol. wt. 950) in 6000 g 1,2-dichloroethane was treated at 40°F with 2100 g ClSO3H in 6000 g Bu2O, and the mixt. was heated at ~100°F for ~5 h. The product was converted to the Na salt and then to the Ca salt by metathesis. Enough diluent oil was added to the sulfonate product to give a 70% conc., which after stripping and filtering contained Ca 1.31, S 1.97, Cl 0.07, and neutral Ca (as sulfonate) 1.10%. A lubricating oil compn. was prepd. that contained the sulfonate (10 mmol/kg) and other additives, including 1.5% TLA 202 [mono(hydroxyalkyl)polybutenylthiophosphonate] [72026-95-0]. The lubricating compn. was tested in the Caterpillar 1-G detergency test, and the results were comparable to those given by a com. Ca petroleum sulfonate under the same conditions.

L2 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN

Citing References

AB The superbasic sulfonates suggested for use in lubricants to give them desirable detergent properties have the general formula RSO3M, where R is an aliph. group contg. ≥50 C atoms and where M represents such metals as Ca, Na, Li, Mg, etc. Detailed descriptions of the prepn. of Ca, Na, and Li polyisobutylenesulfonate are given.

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